



6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R03-OAR-2014-0910; FRL-9931-80-Region 3]

**Approval and Promulgation of Air Quality Implementation Plans;
Pennsylvania; Infrastructure Requirements for the 2008 Ozone and 2010 Sulfur Dioxide
National Ambient Air Quality Standards**

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is approving portions of two State Implementation Plan (SIP) revisions submitted by the Commonwealth of Pennsylvania through the Pennsylvania Department of Environmental Protection (PADEP) pursuant to the Clean Air Act (CAA). Whenever new or revised National Ambient Air Quality Standards (NAAQS) are promulgated, the CAA requires states to submit a plan for the implementation, maintenance, and enforcement of such NAAQS. The plan is required to address basic program elements, including but not limited to regulatory structure, monitoring, modeling, legal authority, and adequate resources necessary to assure implementation, maintenance, and enforcement of the NAAQS. These elements are referred to as infrastructure requirements. PADEP made submittals addressing the infrastructure requirements for the 2008 ozone NAAQS and the 2010 sulfur dioxide (SO₂) primary NAAQS.

DATES: This final rule is effective on **[insert date 30 days from date of publication]**.

ADDRESSES: EPA has established a docket for this action under Docket ID Number

EPA-R03-OAR-2014-0910. All documents in the docket are listed in the www.regulations.gov website. Although listed in the electronic docket, some information is not publicly available, i.e., confidential business information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through www.regulations.gov or in hard copy for public inspection during normal business hours at the Air Protection Division, U.S. Environmental Protection Agency, Region III, 1650 Arch Street, Philadelphia, Pennsylvania 19103. Copies of the State submittal are available at the Pennsylvania Department of Environmental Protection, Bureau of Air Quality Control, P. O. Box 8468, 400 Market Street, Harrisburg, Pennsylvania 17105.

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SUPPLEMENTARY INFORMATION:

I. Summary of SIP Revision

On March 27, 2008 (73 FR 16436), EPA promulgated a revised ozone NAAQS based on 8-hour average concentrations. EPA revised the level of the 8-hour ozone NAAQS from 0.08 parts per million (ppm) to 0.075 ppm. On June 22, 2010 (75 FR 35520), EPA promulgated a 1-hour primary SO₂ NAAQS at a level of 75 parts per billion (ppb), based on a 3-year average of the annual 99th percentile of 1-hour daily maximum concentrations. Pursuant to section 110(a)(1) of the CAA, states are required to submit SIPs meeting the applicable requirements of section 110(a)(2) within three years after promulgation of a new or revised NAAQS or within

such shorter period as EPA may prescribe.

On July 15, 2014, the Commonwealth of Pennsylvania, through the PADEP, submitted SIP revisions that address the infrastructure elements specified in section 110(a)(2) of the CAA necessary to implement, maintain, and enforce the 2008 ozone NAAQS and the 2010 SO₂ NAAQS. On February 6, 2015 (80 FR 6672), EPA published a notice of proposed rulemaking (NPR) for Pennsylvania proposing approval of portions of both SIP revisions as well as portions of SIP submittals for other NAAQS.¹ In the NPR, EPA proposed approval of Pennsylvania's submissions addressing the following infrastructure elements: Section 110(a)(2)(A), (B), (C), (D)(i)(II) (prevention of significant deterioration), (D)(ii), (E), (F), (G), (H), (J), (K), (L), and (M).

Pennsylvania's July 15, 2014 infrastructure SIP submittals for the 2008 ozone NAAQS and the 2010 SO₂ NAAQS did not contain any provisions addressing section 110(a)(2)(I) which pertains to the nonattainment requirements of part D, Title I of the CAA, because this element is not required to be submitted by the 3-year submission deadline of section 110(a)(1) and will be addressed in a separate process. In addition, Pennsylvania's July 15, 2014 infrastructure SIP submittals for the 2008 ozone NAAQS and the 2010 SO₂ NAAQS did not contain any provisions addressing CAA section 110(a)(2)(D)(i)(I), and therefore EPA's February 6, 2015 NPR did not

¹ On July 15, 2014, PADEP also submitted SIP revisions addressing the infrastructure requirements for the 2010 nitrogen dioxide (NO₂) NAAQS and the 2012 fine particulate matter (PM_{2.5}) NAAQS. In the February 6, 2015 NPR, EPA also proposed approval of portions of these infrastructure SIPs. Because EPA did not receive adverse comments applicable to Pennsylvania's infrastructure SIPs for the 2010 NO₂ NAAQS or the 2012 PM_{2.5} NAAQS or applicable to EPA's proposed approval of those specific SIPs, EPA took final action to approve portions of the infrastructure SIPs for the 2010 NO₂ NAAQS and 2012 PM_{2.5} NAAQS on May 8, 2015. 80 FR 26461. Thus, this final action only addresses the July 15, 2014 infrastructure SIPs PADEP submitted addressing the 2008 ozone NAAQS and the 2010 SO₂ NAAQS.

propose any action on the SIP submittals for section 110(a)(2)(D)(i)(I) for either SIP submittal. Thus, this rulemaking action likewise does not include action on CAA section 110(a)(2)(D)(i)(I) for either the 2008 ozone NAAQS or the 2010 SO₂ NAAQS because PADEP's July 15, 2014 infrastructure SIP submittals did not include provisions for this element. Finally, at this time, EPA is not taking action on section 110(a)(2)(D)(i)(II) (which addresses visibility protection) for the 2008 ozone or 2010 SO₂ NAAQS as explained in the NPR. Although Pennsylvania's July 15, 2014 infrastructure SIP submittals for the 2008 ozone NAAQS and the 2010 SO₂ NAAQS referred to Pennsylvania's regional haze SIP to address section 110(a)(2)(D)(i)(II) for visibility protection, EPA intends to take later, separate action on Pennsylvania's SIP submittals for these elements as explained in the NPR and the Technical Support Document (TSD) which accompanied the NPR.

The rationale supporting EPA's proposed rulemaking action approving portions of the July 15, 2014 infrastructure SIP submittals for the 2008 ozone and 2010 SO₂ NAAQS, including the scope of infrastructure SIPs in general, is explained in the NPR and the TSD accompanying the NPR and will not be restated here. The NPR and TSD are available in the docket for this rulemaking at www.regulations.gov, Docket ID Number EPA-R03-OAR-2014-0910.² EPA received public comments on the NPR. Summaries of the comments as well as EPA's responses are in section II of this rulemaking notice. EPA's responses provide further explanation and rationale where appropriate to support the final action approving portions of the July 15, 2014 infrastructure SIPs.

² EPA's final rulemaking action on Pennsylvania's infrastructure SIP revisions for the 2010 NO₂ NAAQS and the 2012 PM_{2.5} NAAQS can also be found in this docket with Docket ID Number EPA-R03-OAR-2014-0910.

II. Public Comments and EPA's Responses

EPA received substantive comments from two commenters, the State of New Jersey Department of Environmental Protection (NJDEP) and the Sierra Club, on the February 6, 2015 proposed rulemaking action on Pennsylvania's 2008 ozone and 2010 SO₂ infrastructure SIP revisions. The Sierra Club's comments on the NPR include general comments on infrastructure SIP requirements for emission limitations and specific comments on emission limitations to address the 2010 SO₂ NAAQS and the 2008 ozone NAAQS. A full set of all comments is provided in the docket for today's final rulemaking action.

A. NJDEP

Comment: NJDEP asserts that Pennsylvania's infrastructure SIP is deficient because it does not include any information relating to Pennsylvania's "good neighbor" obligation to address CAA section 110(a)(2)(D).³ NJDEP asserts the ability of downwind states including New Jersey to attain the 2008 ozone NAAQS is substantially impacted by interstate transport of pollution from Pennsylvania. NJDEP asserts recent EPA modeling for the 2008 ozone NAAQS demonstrates Pennsylvania significantly contributes to ozone nonattainment areas in New Jersey and other states. New Jersey further asserts that EPA must "make a finding that Pennsylvania has failed to submit a SIP that complies with Section 110(a)(2)(D) of the Clean Air Act" because Pennsylvania did not make a submission to address 110(a)(2)(D).

Response: In this rulemaking EPA is not taking any final action with respect to the provisions

³ EPA believes NJDEP refers specifically to CAA section 110(a)(2)(D)(i)(I) which addresses interstate transport of pollution and not to section 110(a)(2)(D)(i)(II) which addresses visibility protection and prevention of significant deterioration.

in section 110(a)(2)(D)(i)(I) – the portion of the good neighbor provision which addresses emissions that significantly contribute to nonattainment or interfere with maintenance of the NAAQS in another state. In its July 15, 2014 infrastructure SIP revisions for several NAAQS, the Commonwealth of Pennsylvania did not include any provisions in its SIP revision submittals to address the requirements of section 110(a)(2)(D)(i)(I). In the NPR, EPA did not propose to take any action with respect to Pennsylvania’s obligations pursuant to section 110(a)(2)(D)(i)(I) for the July 15, 2014 infrastructure SIP submittals and is not, in this rulemaking action, taking any final action on the 110(a)(2)(D)(i)(I) obligations.

Because Pennsylvania did not make a submission in its July 15, 2014 SIP submittals to address the requirements of section 110(a)(2)(D)(i)(I), EPA is not required to have proposed or to take final SIP approval or disapproval action on this element under section 110(k) of the CAA. In this case, there has been no substantive submission for EPA to evaluate under section 110(k). EPA interprets its authority under section 110(k)(3) of the CAA as affording EPA the discretion to approve, or conditionally approve, individual elements of Pennsylvania’s infrastructure SIP submissions, separate and apart from any action with respect to the requirements of section 110(a)(2)(D)(i)(I) of the CAA. EPA views discrete infrastructure SIP requirements in section 110(a)(2), such as the requirements of 110(a)(2)(D)(i)(I), as severable from the other infrastructure elements and interprets section 110(k)(3) as allowing it to act on individual severable measures in a plan submission.

EPA acknowledges NJDEP’s concern for the interstate transport of air pollutants and agrees in general that sections 110(a)(1) and (a)(2) of the CAA require states to submit, within three years

of promulgation of a new or revised NAAQS, a plan which addresses cross-state air pollution under section 110(a)(2)(D)(i)(I). However, in this rulemaking, EPA is only approving portions of Pennsylvania's infrastructure SIP submissions for the 2008 ozone and 2010 SO₂ NAAQS which did not include provisions for 110(a)(2)(D)(i)(I) for interstate transport. Findings of failure to submit a SIP submission for a NAAQS addressing a specific element, such as CAA section 110(a)(2)(D)(i)(I), would need to occur in separate rulemakings. As that issue was not addressed in the February 6, 2015 NPR and is therefore not pertinent to this rulemaking, EPA provides no further response. Pennsylvania's obligations regarding interstate transport of ozone pollution for the 2008 ozone NAAQS will be addressed in another rulemaking.

B. Sierra Club General Comments on Emission Limitations

1. The Plain Language of the CAA

Comment 1: Sierra Club (hereafter referred to as Commenter) contends that the plain language of section 110(a)(2)(A) of the CAA, legislative history of the CAA, case law, EPA regulations such as 40 CFR 51.112(a), and EPA interpretations in rulemakings require the inclusion of enforceable emission limits in an infrastructure SIP to aid in attaining and maintaining the NAAQS and contends an infrastructure SIP must be disapproved where emission limits are inadequate to prevent exceedances of the NAAQS. The Commenter states EPA may not approve an infrastructure SIP that fails to ensure attainment and maintenance of the NAAQS.

The Commenter states that the main objective of the infrastructure SIP process "is to ensure that all areas of the country meet the NAAQS" and states that nonattainment areas are addressed through "nonattainment SIPs." The Commenter asserts the NAAQS "are the foundation upon

which air emission standards for the entire country are set” including specific emission limitations for most large stationary sources, such as coal-fired power plants. The Commenter discusses the CAA’s framework whereby states have primary responsibility to assure air quality within the state pursuant to CAA section 107(a) which the states carry out through SIPs such as infrastructure SIPs required by section 110(a)(2). The Commenter also states that on its face the CAA requires infrastructure SIPs “to be adequate to prevent exceedances of the NAAQS.” In support, the Commenter quotes the language in section 110(a)(1) which requires states to adopt a plan for implementation, maintenance, and enforcement of the NAAQS and the language in section 110(a)(2)(A) which requires SIPs to include enforceable emissions limitations as may be necessary to meet the requirements of the CAA which the Commenter claims includes attainment and maintenance of the NAAQS. The Commenter notes the CAA definition of emission limit and reads these CAA provisions together to require “enforceable emission limits on source emissions sufficient to ensure maintenance of the NAAQS.”

Response 1: EPA disagrees that section 110 is clear “on its face” and must be interpreted in the manner suggested by the Commenter. As we have previously explained in response to the Commenter’s similar comments on EPA’s action approving other states’ infrastructure SIPs, section 110 is only one provision that is part of the complicated structure governing implementation of the NAAQS program under the CAA, as amended in 1990, and it must be interpreted in the context of not only that structure, but also of the historical evolution of that structure.⁴

⁴ See 80 FR 11557 (March 4, 2015) (approval of Virginia SO₂ infrastructure SIP); 79 FR 62022 (October 16, 2014) (approval of West Virginia SO₂ infrastructure SIP); 79 FR 19001 (April 7, 2014) (approval of West Virginia ozone infrastructure SIP); and 79 FR 17043 (March 27, 2014) (approval of Virginia ozone infrastructure SIP).

EPA interprets infrastructure SIPs as more general planning SIPs, consistent with the CAA as understood in light of its history and structure. When Congress enacted the CAA in 1970, it did not include provisions requiring states and the EPA to label areas as attainment or nonattainment. Rather, states were required to include all areas of the state in “air quality control regions” (AQCRs) and section 110 set forth the core substantive planning provisions for these AQCRs. At that time, Congress anticipated that states would be able to address air pollution quickly pursuant to the very general planning provisions in section 110 and could bring all areas into compliance with a new NAAQS within five years. Moreover, at that time, section 110(a)(2)(A)(i) specified that the section 110 plan provide for “attainment” of the NAAQS and section 110(a)(2)(B) specified that the plan must include “emission limitations, schedules, and timetables for compliance with such limitations, and such other measures as may be necessary to insure attainment and maintenance [of the NAAQS].”

In 1977, Congress recognized that the existing structure was not sufficient and many areas were still violating the NAAQS. At that time, Congress for the first time added provisions requiring states and EPA to identify whether areas of a state were violating the NAAQS (i.e., were nonattainment) or were meeting the NAAQS (i.e., were attainment) and established specific planning requirements in section 172 for areas not meeting the NAAQS. In 1990, many areas still had air quality not meeting the NAAQS and Congress again amended the CAA and added yet another layer of more prescriptive planning requirements for each of the NAAQS. At that same time, Congress modified section 110 to remove references to the section 110 SIP providing for attainment, including removing pre-existing section 110(a)(2)(A) in its entirety and

renumbering subparagraph (B) as section 110(a)(2)(A). Additionally, Congress replaced the clause “as may be necessary to insure attainment and maintenance [of the NAAQS]” with “as may be necessary or appropriate to meet the applicable requirements of this chapter.” Thus, the CAA has significantly evolved in the more than 40 years since it was originally enacted. While at one time section 110 of the CAA did provide the only detailed SIP planning provisions for states and specified that such plans must provide for attainment of the NAAQS, under the structure of the current CAA, section 110 is only the initial stepping-stone in the planning process for a specific NAAQS. More detailed, later-enacted provisions govern the substantive planning process, including planning for attainment of the NAAQS.

Thus, EPA believes that section 110 of the CAA is only one provision that is part of the complicated structure governing implementation of the NAAQS program under the CAA, as amended in 1990, and it must be interpreted in the context of that structure and the historical evolution of that structure. In light of the revisions to section 110 since 1970 and the later-promulgated and more specific planning requirements of the CAA, EPA reasonably interprets the requirement in section 110(a)(2)(A) of the CAA that the plan provide for “implementation, maintenance and enforcement” to mean that the SIP must contain enforceable emission limits that will aid in attaining and/or maintaining the NAAQS and that the state demonstrate that it has the necessary tools to implement and enforce a NAAQS, such as adequate state personnel and an enforcement program. EPA has interpreted the requirement for emission limitations in section 110 to mean that the state may rely on measures already in place to address the pollutant at issue or any new control measures that the state may choose to submit. Finally, as EPA stated in the Infrastructure SIP Guidance which specifically provides guidance to states in addressing the

2008 ozone and 2010 SO₂ NAAQS, “[t]he conceptual purpose of an infrastructure SIP submission is to assure that the air agency’s SIP contains the necessary structural requirements for the new or revised NAAQS, whether by establishing that the SIP already contains the necessary provisions, by making a substantive SIP revision to update the SIP, or both.” Infrastructure SIP Guidance at p. 2.⁵

The Commenter makes general allegations that Pennsylvania does not have sufficient protective measures to prevent ozone violations/exceedances and SO₂ NAAQS exceedances. EPA addressed the adequacy of Pennsylvania’s infrastructure SIP for 110(a)(2)(A) purposes to meet applicable requirements of the CAA in the TSD accompanying the February 6, 2015 NPR and explained why the SIP includes enforceable emission limitations and other control measures necessary for maintenance of the 2008 ozone and 2010 SO₂ NAAQS throughout the Commonwealth.⁶

2. The Legislative History of the CAA

Comment 2: The Commenter cites two excerpts from the legislative history of the 1970 CAA claiming they support an interpretation that SIP revisions under CAA section 110 must include emissions limitations sufficient to show maintenance of the NAAQS in all areas of the state. The Commenter also contends that the legislative history of the CAA supports the interpretation that

⁵ Thus, EPA disagrees with the Commenter’s general assertion that the main objective of infrastructure SIPs is to ensure all areas of the country meet the NAAQS, as we believe the infrastructure SIP process is the opportunity to review the structural requirements of a state’s air program. While the NAAQS can be a foundation upon which emission limitations are set, as explained in responses to subsequent comments, these emission limitations are generally set in the attainment planning process envisioned by part D of title I of the CAA, including, but not limited to, CAA sections 172, 181-182, and 191-192.

⁶ The TSD for this action is available on line at www.regulations.gov, Docket ID Number EPA-R03-OAR-2014-0910.

infrastructure SIPs under section 110(a)(2) must include enforceable emission limitations, citing the Senate Committee Report and the subsequent Senate Conference Report accompanying the 1970 CAA.

Response 2: As provided in the previous response, the CAA, as enacted in 1970, including its legislative history, cannot be interpreted in isolation from the later amendments that refined that structure and deleted relevant language from section 110 concerning demonstrating attainment. *See also* 79 FR at 17046 (responding to comments on Virginia’s ozone infrastructure SIP). In any event, the two excerpts of legislative history the Commenter cites merely provide that states should include enforceable emission limits in their SIPs, and they do not mention or otherwise address whether states are required to include maintenance plans for all areas of the state as part of the infrastructure SIP. As provided in response to another comment in this rulemaking, the TSD for the proposed rule explains why the Pennsylvania SIP includes enforceable emissions limitations for ozone precursors and for SO₂ for the relevant areas.

3. Case Law

Comment 3: The Commenter also discusses several cases applying the CAA which the Commenter claims support its contention that courts have been clear that section 110(a)(2)(A) requires enforceable emissions limits in infrastructure SIPs to prevent exceedances of the NAAQS. The Commenter first cites to language in *Train v. NRDC*, 421 U.S. 60, 78 (1975), addressing the requirement for “emission limitations” and stating that emission limitations “are specific rules to which operators of pollution sources are subject, and which, if enforced, should result in ambient air which meet the national standards.” The Commenter also cites to

Pennsylvania Dept. of Env'tl. Resources v. EPA, 932 F.2d 269, 272 (3d Cir. 1991) for the proposition that the CAA directs EPA to withhold approval of a SIP where it does not ensure maintenance of the NAAQS, and to *Mision Industrial, Inc. v. EPA*, 547 F.2d 123, 129 (1st Cir. 1976), which quoted section 110(a)(2)(B) of the CAA of 1970. The Commenter contends that the 1990 Amendments do not alter how courts have interpreted the requirements of section 110, quoting *Alaska Dept. of Env'tl. Conservation v. EPA*, 540 U.S. 461, 470 (2004) which in turn quoted section 110(a)(2)(A) of the CAA and also stated that “SIPs must include certain measures Congress specified” to ensure attainment of the NAAQS. The Commenter also quotes several additional opinions in this vein. *Mont. Sulphur & Chem. Co. v. EPA*, 666 F.3d 1174, 1180 (9th Cir. 2012) (“The Clean Air Act directs states to develop implementation plans – SIPs – that ‘assure’ attainment and maintenance of [NAAQS] through enforceable emissions limitations”); *Hall v. EPA* 273 F.3d 1146, 1153 (9th Cir. 2001) (“Each State must submit a [SIP] that specif[ies] the manner in which [NAAQS] will be achieved and maintained within each air quality control region in the State”); *Conn. Fund for Env’t, Inc. v. EPA*, 696 F.2d 169, 172 (D.C. Cir. 1982) (CAA requires SIPs to contain “measures necessary to ensure attainment and maintenance of NAAQS”). Finally, the Commenter cites *Mich. Dept. of Env'tl. Quality v. Browner*, 230 F.3d 181 (6th Cir. 2000) for the proposition that EPA may not approve a SIP revision that does not demonstrate how the rules would not interfere with attainment and maintenance of the NAAQS.

Response 3: None of the cases the Commenter cites support its contention that section 110(a)(2)(A) is clear that infrastructure SIPs must include detailed plans providing for attainment *and* maintenance of the NAAQS in all areas of the state, nor do they shed light on how section 110(a)(2)(A) may reasonably be interpreted. With the exception of *Train*, none of the cases the

Commenter cites concerned the interpretation of CAA section 110(a)(2)(A) (or section 110(a)(2)(B) of the pre-1990 Act). Rather, the courts reference section 110(a)(2)(A) (or section 110(a)(2)(B) of the pre-1990 CAA) in the background sections of decisions in the context of a challenge to an EPA action on revisions to a SIP that was required and approved or disapproved as meeting other provisions of the CAA or in the context of an enforcement action.

In *Train*, 421 U.S. 60, the Court was addressing a state revision to an attainment plan submission made pursuant to section 110 of the CAA, the sole statutory provision at that time regulating such submissions. The issue in that case concerned whether changes to requirements that would occur before attainment was required were variances that should be addressed pursuant to the provision governing SIP revisions or were “postponements” that must be addressed under section 110(f) of the CAA of 1970, which contained prescriptive criteria. The Court concluded that EPA reasonably interpreted section 110(f) not to restrict a state’s choice of the mix of control measures needed to attain the NAAQS and that revisions to SIPs that would not impact attainment of the NAAQS by the attainment date were not subject to the limits of section 110(f). Thus the issue was not whether a section 110 SIP needs to provide for attainment or whether emissions limits providing such are needed as part of the SIP; rather the issue was which statutory provision governed when the state wanted to revise the emission limits in its SIP if such revision would not impact attainment or maintenance of the NAAQS. To the extent the holding in the case has any bearing on how section 110(a)(2)(A) might be interpreted, it is important to realize that in 1975, when the opinion was issued, section 110(a)(2)(B) (the predecessor to section 110(a)(2)(A)) expressly referenced the requirement to attain the NAAQS, a reference that was removed in 1990.

The decision in *Pennsylvania Dept. of Env'tl. Resources* was also decided based on the pre-1990 provision of the CAA. At issue was whether EPA properly rejected a revision to an approved plan where the inventories relied on by the state for the updated submission had gaps. The Court quoted section 110(a)(2)(B) of the pre-1990 CAA in support of EPA's disapproval, but did not provide any interpretation of that provision. Yet, even if the Court had interpreted that provision, EPA notes that it was modified by Congress in 1990; thus, this decision has little bearing on the issue here.

At issue in *Mision Industrial*, 547 F.2d 123, was the definition of "emissions limitation," not whether section 110 requires the state to demonstrate how all areas of the state will attain and maintain the NAAQS as part of their infrastructure SIPs. The language from the opinion the Commenter quotes does not interpret but rather merely describes section 110(a)(2)(A). The Commenter does not raise any concerns about whether the measures relied on by the Commonwealth in the infrastructure SIPs are "emissions limitations" and the decision in this case has no bearing here.⁷ In *Mont. Sulphur & Chem. Co.*, 666 F.3d 1174, the Court was not reviewing an infrastructure SIP, but rather EPA's disapproval of a SIP and promulgation of a federal implementation plan (FIP) after a long history of the state failing to submit an adequate SIP in response to EPA's finding under section 110(k)(5) that the previously approved SIP was substantially inadequate to attain or maintain the NAAQS. The Court cited generally to sections 107 and 110(a)(2)(A) of the CAA for the proposition that SIPs should assure attainment and

⁷ While the Commenter does contend that the Commonwealth shouldn't be allowed to rely on emission reductions that were developed for the prior standards (which we address herein), it does not claim that any of the measures are not "emissions limitations" within the definition of the CAA.

maintenance of NAAQS through emission limitations, but this language was not part of the Court's holding in the case, which focused instead on whether EPA's finding of SIP inadequacy, disapproval of the state's required responsive attainment demonstration under section 110(k)(5), and adoption of a remedial FIP under section 110(c) were lawful. The Commenter suggests that *Alaska Dept. of Env'tl. Conservation*, 540 U.S. 461, stands for the proposition that the 1990 CAA Amendments do not alter how courts interpret section 110. This claim is inaccurate. Rather, the Court quoted section 110(a)(2)(A), which, as noted previously, differs from the pre-1990 version of that provision and the Court made no mention of the changed language. Furthermore, the Commenter also quotes the Court's statement that "SIPs must include certain measures Congress specified," but that statement specifically referenced the requirement in section 110(a)(2)(C), which requires an enforcement program and a program for the regulation of the modification and construction of new sources. Notably, at issue in that case was the state's "new source" permitting program, not its infrastructure SIP.

Two of the other cases the Commenter cites, *Mich. Dept. of Env'tl. Quality*, 230 F.3d 181, and *Hall*, 273 F.3d 1146, interpret CAA section 110(l), the provision governing "revisions" to plans, and not the initial plan submission requirement under section 110(a)(2) for a new or revised NAAQS, such as the infrastructure SIP at issue in this instance. In those cases, the courts cited to section 110(a)(2)(A) solely for the purpose of providing a brief background of the CAA.

EPA does not believe any of these court decisions addressed required measures for infrastructure SIPs and believes nothing in the opinions addressed whether infrastructure SIPs need to contain measures to ensure attainment and maintenance of the NAAQS.

4. EPA Regulations, Such as 40 CFR 51.112(a)

Comment 4: The Commenter cites to 40 CFR 51.112(a), providing that “[e]ach plan must demonstrate that the measures, rules and regulations contained in it are adequate to provide for the timely attainment and maintenance of the [NAAQS].” The Commenter asserts that this regulation requires infrastructure SIPs to include emissions limits necessary to ensure attainment and maintenance of the NAAQS. The Commenter states that the provisions of 40 CFR 51.112 are not limited to nonattainment SIPs and instead applies to infrastructure SIPs which are required to attain and maintain the NAAQS in areas not designated nonattainment. The Commenter relies on a statement in the preamble to the 1986 action restructuring and consolidating provisions in part 51, in which EPA stated that “[i]t is beyond the scope of th[is] rulemaking to address the provisions of Part D of the Act...” 51 FR 40656, 40656 (November 7, 1986). The Commenter asserts 40 CFR 51.112(a) identifies the plans to which it applies as those that implement the NAAQS.

Response 4: The Commenter’s reliance on 40 CFR 51.112 to support its argument that infrastructure SIPs must contain emission limits adequate to ensure attainment and maintenance of the NAAQS is not supported. As an initial matter, EPA notes this regulatory provision was initially promulgated and later restructured and consolidated prior to the CAA Amendments of 1990, in which Congress removed all references to “attainment” in section 110(a)(2)(A). And, it is clear on its face that 40 CFR 51.112 applies to plans specifically designed to attain the NAAQS. EPA interprets these provisions to apply when states are developing “control strategy” SIPs such as the detailed attainment and maintenance plans required under other provisions of

the CAA, as amended in 1977 and again in 1990, such as sections 175A, 181-182, and 191-192. The Commenter suggests that these provisions must apply to section 110 SIPs because in the preamble to EPA's action "restructuring and consolidating" provisions in part 51, EPA stated that the new attainment demonstration provisions in the 1977 Amendments to the CAA were "beyond the scope" of the rulemaking. It is important to note, however, that EPA's action in 1986 was not to establish new substantive planning requirements, but rather was meant merely to consolidate and restructure provisions that had previously been promulgated. EPA noted that it had already issued guidance addressing the new "Part D" attainment planning obligations. Also, as to maintenance regulations, EPA expressly stated that it was not making any revisions other than to re-number those provisions. 51 FR 40657.

Although EPA was explicit that it was not establishing requirements interpreting the provisions of new "Part D" of the CAA, it is clear that the regulations being restructured and consolidated were intended to address control strategy plans. In the preamble, EPA clearly stated that 40 CFR 51.112 was replacing 40 CFR 51.13 ("Control strategy: SO_x and PM (portion)"), 51.14 ("Control strategy: CO, HC, O_x and NO₂ (portion)"), 51.80 ("Demonstration of attainment: Pb (portion)"), and 51.82 ("Air quality data (portion)"). *Id.* at 40660. Thus, the present-day 40 CFR 51.112 contains consolidated provisions that are focused on control strategy SIPs, and the infrastructure SIP is not such a plan.

5. EPA Interpretations in Other Rulemakings

Comment 5: The Commenter also references a prior EPA rulemaking action where EPA disapproved a SIP and claims that action shows EPA relied on section 110(a)(2)(A) and 40 CFR

51.112 to reject the SIP. The Commenter points to a 2006 partial approval and partial disapproval of revisions to Missouri's existing control strategy plans addressing the SO₂ NAAQS. The Commenter claims EPA cited section 110(a)(2)(A) for disapproving a revision to the state plan on the basis that the State failed to demonstrate the SIP was sufficient to ensure maintenance of the SO₂ NAAQS after revision of an emission limit and claims EPA cited to 40 CFR 51.112 as requiring that a plan demonstrates the rules in a SIP are adequate to attain the NAAQS. The Commenter claims the revisions to Missouri's control strategy SIP for SO₂ were rejected by EPA because the revised control strategy limits were also in Missouri's infrastructure SIP and thus the weakened limits would have impacted the infrastructure SIP's ability to aid in attaining and maintaining the NAAQS.

Response 5: EPA does not agree that the prior Missouri rulemaking action referenced by the Commenter establishes how EPA reviews infrastructure SIPs. It is clear from the final Missouri rule that EPA was not reviewing initial infrastructure SIP submissions under section 110 of the CAA, but rather reviewing revisions that would make an already approved SIP designed to demonstrate attainment of the NAAQS less stringent. EPA's partial approval and partial disapproval of revisions to restrictions on emissions of sulfur compounds for the Missouri SIP in 71 FR 12623 addressed a control strategy SIP and not an infrastructure SIP. Nothing in that action addresses the necessary content of the initial infrastructure SIP for a new or revised NAAQS.

C. Sierra Club Comments on Pennsylvania SIP SO₂ Emission Limits

The Commenter contends that the Pennsylvania 2008 ozone and 2010 SO₂ infrastructure SIP revisions did not revise the existing ozone precursor emission limits and SO₂ emission limits in response to the 2008 ozone and 2010 SO₂ NAAQS and fail to comport with assorted CAA requirements for SIPs to establish enforceable emission limits that are adequate to prohibit NAAQS exceedances in areas not designated nonattainment. EPA will address SO₂ comments and ozone comments respectively.

Comment 6: Citing section 110(a)(2)(A) of the CAA, the Commenter contends that EPA may not approve Pennsylvania's proposed 2010 SO₂ infrastructure SIP because it does not include enforceable 1-hour SO₂ emission limits for sources currently allowed to cause "NAAQS exceedances." The Commenter asserts the proposed infrastructure SIP fails to include enforceable 1-hour SO₂ emissions limits or other required measures to ensure attainment and maintenance of the SO₂ NAAQS in areas not designated nonattainment as the Commenter claims is required by section 110(a)(2)(A). The Commenter asserts an infrastructure SIP must ensure, through state-wide regulations or source specific requirements, proper mass limitations and emissions rates with short term averaging on specific large sources of pollutants such as power plants. The Commenter asserts that emission limits are especially important for meeting the 1-hour SO₂ NAAQS because SO₂ impacts are strongly source-oriented. The Commenter states coal-fired electric generating units (EGUs) are large contributors to SO₂ emissions but contends Pennsylvania did not demonstrate that emissions allowed by the proposed infrastructure SIP from such large sources of SO₂ will ensure compliance with the 2010 1-hour SO₂ NAAQS. The Commenter claims the proposed infrastructure SIP would allow major sources to continue

operating with present emission limits.⁸ The Commenter then refers to air dispersion modeling it conducted for five coal-fired EGUs in Pennsylvania, including Brunner Island Steam Electric Station, Montour Steam Electric Station, Cheswick Power Station, New Castle Power Plant, and Shawville Coal Plant. The Commenter asserts the results of the air dispersion modeling it conducted employing EPA's AERMOD program for modeling used the plants' allowable emissions and showed the plants could cause exceedances of the 2010 SO₂ NAAQS with allowable emissions.⁹ Based on the modeling, the Commenter asserts the Pennsylvania SO₂ infrastructure SIP submittal authorizes the EGUs to cause exceedances of the NAAQS with allowable emission rates and therefore the infrastructure SIP fails to include adequate enforceable emission limitations or other required measures for sources of SO₂ sufficient to ensure attainment and maintenance of the 2010 SO₂ NAAQS.¹⁰ The Commenter therefore asserts EPA must disapprove Pennsylvania's proposed 2010 SO₂ infrastructure SIP revision. In addition, the Commenter asserts "EPA may only approve an I-SIP that incorporates enforceable emission limitations on major sources of SO₂ pollution in the state, including coal-fired power plants, with one-hour averaging times that are no less stringent than the modeling based limits . . . necessary to protect the one-hour SO₂ NAAQS and attain and maintain the standard in Pennsylvania. These emission limits must apply at all times . . . to ensure that Pennsylvania is able to attain and maintain the 2010 SO₂ NAAQS." The Commenter claimed additional modeling for two EGUs, Brunner Island and Montour, done with actual historical hourly SO₂ emissions show these facilities have actually been causing "exceedances of the NAAQS" while

⁸ The Commenter provides a chart in its comments claiming 80 percent of SO₂ emissions in Pennsylvania are from coal-electric generating units based on 2011 data.

⁹ The Commenter asserts its modeling followed protocols pursuant to 40 CFR Part 51, Appendix W and EPA's modeling guidance issued March 2011 and December 2013.

¹⁰ The Commenter again references 40 CFR 51.112 in support of its position that the infrastructure SIP must include emission limits for attainment and maintenance of the 2010 SO₂ NAAQS.

operating pursuant to existing emission limits which the Commenter claims Pennsylvania included as part of the SO₂ infrastructure SIP submission. The Commenter also asserts that any coal-fired units slated for retirement should be incorporated into the infrastructure SIP with an enforceable emission limit or control measure.

Response 6: EPA disagrees with the Commenter that EPA must disapprove Pennsylvania's SO₂ infrastructure SIP for the reasons provided by the Commenter including the Commenter's modeling results and insufficient SO₂ emission limits. EPA is not in this action making a determination regarding the Commonwealth's current air quality status or regarding whether its control strategy is sufficient to attain and maintain the NAAQS. Therefore, EPA is not making any judgment on whether the Commenter's submitted modeling demonstrates the NAAQS exceedances that the Commenter claims. EPA believes that section 110(a)(2)(A) of the CAA is reasonably interpreted to require states to submit infrastructure SIPs that reflect the first step in their planning for attainment and maintenance of a new or revised NAAQS. These SIP revisions should contain a demonstration that the state has the available tools and authority to develop and implement plans to attain and maintain the NAAQS and show that the SIP has enforceable control measures. In light of the structure of the CAA, EPA's long-standing position regarding infrastructure SIPs is that they are general planning SIPs to ensure that the state has adequate resources and authority to implement a NAAQS in general throughout the state and not detailed attainment and maintenance plans for each individual area of the state. As mentioned above, EPA has interpreted this to mean, with regard to the requirement for emission limitations that states may rely on measures already in place to address the pollutant at issue or any new control measures that *the state* may choose to submit.

As stated in response to a previous more general comment, section 110 of the CAA is only one provision that is part of the complicated structure governing implementation of the NAAQS program under the CAA, as amended in 1990, and it must be interpreted in the context of not only that structure, but also of the historical evolution of that structure. In light of the revisions to section 110 since 1970 and the later-promulgated and more specific planning requirements of the CAA, EPA reasonably interprets the requirement in section 110(a)(2)(A) of the CAA that the plan provide for “implementation, maintenance and enforcement” to mean that the SIP must contain enforceable emission limits that will aid in attaining and/or maintaining the NAAQS and that the Commonwealth demonstrate that it has the necessary tools to implement and enforce a NAAQS, such as adequate state personnel and an enforcement program. As discussed above, EPA has interpreted the requirement for emission limitations in section 110 to mean that the state may rely on measures already in place to address the pollutant at issue or any new control measures that the state may choose to submit. Finally, as EPA stated in the Infrastructure SIP Guidance which specifically provides guidance to states in addressing the 2010 SO₂ NAAQS and the 2008 Ozone NAAQS, “[t]he conceptual purpose of an infrastructure SIP submission is to assure that the air agency’s SIP contains the necessary structural requirements for the new or revised NAAQS, whether by establishing that the SIP already contains the necessary provisions, by making a substantive SIP revision to update the SIP, or both.” Infrastructure SIP Guidance at p. 2.

On April 12, 2012, EPA explained its expectations regarding implementation of the 2010 SO₂ NAAQS via letters to each of the states. EPA communicated in the April 2012 letters that all

states were expected to submit SIPs meeting the “infrastructure” SIP requirements under section 110(a)(2) of the CAA by June 2013. At the time, EPA was undertaking a stakeholder outreach process to continue to develop possible approaches for determining attainment status under the SO₂ NAAQS and implementing this NAAQS. EPA was abundantly clear in the April 2012 letters that EPA did not expect states to submit substantive attainment demonstrations or modeling demonstrations showing attainment for areas not designated nonattainment in infrastructure SIPs due in June 2013. Although EPA had previously suggested in its 2010 SO₂ NAAQS preamble and in prior draft implementation guidance in 2011 that states should, in the unique SO₂ context, use the section 110(a) SIP process as the vehicle for demonstrating attainment of the NAAQS, this approach was never adopted as a binding requirement and was subsequently discarded in the April 2012 letters to states. The April 2012 letters recommended states focus infrastructure SIPs due in June 2013, such as Pennsylvania’s SO₂ infrastructure SIP, on traditional “infrastructure elements” in section 110(a)(1) and (2) rather than on modeling demonstrations for future attainment for areas not designated as nonattainment.¹¹

¹¹ In EPA’s final SO₂ NAAQS preamble (75 FR 35520 (June 22, 2010)) and subsequent draft guidance in March and September 2011, EPA had expressed its expectation that many areas would be initially designated as unclassifiable due to limitations in the scope of the ambient monitoring network and the short time available before which states could conduct modeling to support their designations recommendations due in June 2011. In order to address concerns about potential violations in these unclassifiable areas, EPA initially recommended that states submit substantive attainment demonstration SIPs based on air quality modeling by June 2013 (under section 110(a)) that show how their unclassifiable areas would attain and maintain the NAAQS in the future. *Implementation of the 2010 Primary 1-Hour SO₂ NAAQS, Draft White Paper for Discussion*, May 2012 (2012 Draft White Paper) (for discussion purposes with Stakeholders at meetings in May and June 2012), available at <http://www.epa.gov/airquality/sulfurdioxide/implement.html>. However, EPA clearly stated in this 2012 Draft White Paper its clarified implementation position that it was no longer recommending such attainment demonstrations for unclassifiable areas for June 2013 infrastructure SIPs. *Id.* EPA had stated in the preamble to the NAAQS and in the prior 2011 draft guidance that EPA intended to develop and seek public comment on guidance for modeling and development of SIPs for sections 110 and 191 of the CAA. Section 191 of the CAA requires states to submit SIPs in accordance with section 172 for areas designated nonattainment with the SO₂ NAAQS. After seeking such comment, EPA has now issued guidance for the nonattainment area SIPs due pursuant to sections 191 and 172. *See Guidance for 1-Hour SO₂ Nonattainment Area SIP Submissions*, Stephen D. Page, Director, EPA’s Office of Air Quality Planning and Standards, to Regional Air Division Directors Regions 1- 10, April 23, 2014. In September 2013, EPA had previously issued specific guidance relevant to infrastructure SIP submissions due for the NAAQS, including the 2010 SO₂ NAAQS. *See Infrastructure SIP Guidance.*

Therefore, EPA asserts that evaluations of modeling demonstrations such as those submitted by the Commenter are more appropriately to be considered in actions that make determinations regarding states' current air quality status or regarding future air quality status. EPA also asserts that SIP revisions for SO₂ nonattainment areas including measures and modeling demonstrating attainment are due by the dates statutorily prescribed under subpart 5 under part D. Those submissions are due no later than 18 months after an area is designated nonattainment for SO₂, under CAA section 191(a). Thus, the CAA directs states to submit these SIP requirements that are specific for nonattainment areas on a separate schedule from the "structural requirements" of 110(a)(2) which are due within three years of adoption or revision of a NAAQS and which apply statewide. The infrastructure SIP submission requirement does not move up the date for any required submission of a part D plan for areas designated nonattainment for the new NAAQS. Thus, elements relating to demonstrating attainment for areas not attaining the NAAQS are not necessary for infrastructure SIP submissions, and the CAA does not provide explicit requirements for demonstrating attainment for areas that have not yet been designated regarding attainment with a particular NAAQS.

As stated previously, EPA believes that the proper inquiry at this juncture is whether Pennsylvania has met the basic structural SIP requirements appropriate at the point in time EPA is acting upon the infrastructure submittal. Emissions limitations and other control measures needed to attain the NAAQS in areas designated nonattainment for that NAAQS are due on a different schedule from the section 110 infrastructure elements. A state, like Pennsylvania, may reference pre-existing SIP emission limits or other rules contained in part D plans for previous

NAAQS in an infrastructure SIP submission. Pennsylvania's existing rules and emission reduction measures in the SIP that control emissions of SO₂ were discussed in the TSD. These provisions have the ability to reduce SO₂ overall. Although the Pennsylvania SIP relies on measures and programs used to implement previous SO₂ NAAQS, these provisions are not limited to reducing SO₂ levels to meet one specific NAAQS and will continue to provide benefits for the 2010 SO₂ NAAQS.

Additionally, as discussed in EPA's TSD supporting the NPR, Pennsylvania has the ability to revise its SIP when necessary (e.g. in the event the Administrator finds the plan to be substantially inadequate to attain the NAAQS or otherwise meet all applicable CAA requirements) as required under element H of section 110(a)(2). *See* Section 4(1) of the APCA, 35 P.S. § 4004(1), which empowers PADEP to implement the provisions of the CAA. Section 5 of the APCA, 35 P.S. § 4005, authorizes the Environmental Quality Board (EQB) to adopt rules and regulations for the prevention, control, reduction and abatement of air pollution throughout the Commonwealth.

EPA believes the requirements for emission reduction measures for an area designated nonattainment for the 2010 primary SO₂ NAAQS are in sections 172 and 191-192 of the CAA, and therefore, the appropriate avenue for implementing requirements for necessary emission limitations for demonstrating attainment with the 2010 SO₂ NAAQS is through the attainment planning process contemplated by those sections of the CAA. On August 5, 2013, EPA designated as nonattainment most areas in locations where existing monitoring data from 2009-2011 indicated violations of the 1-hour SO₂ standard. 78 FR 47191. At that time, four areas in

Pennsylvania had monitoring data from 2009-2011 indicating violations of the 1-hour SO₂ standard, and these areas were designated nonattainment in Pennsylvania. *See* 40 CFR 81.339. Also on March 2, 2015 the United States District Court for the Northern District of California entered a Consent Decree among the EPA, Sierra Club and Natural Resources Defense Council to resolve litigation concerning the deadline for completing designations for the 2010 SO₂ NAAQS. Pursuant to the terms of the Consent Decree, EPA will complete additional designations for all remaining areas of the country including remaining areas in Pennsylvania.¹²

For the four areas designated nonattainment in Pennsylvania in August 2013, attainment SIPs were due by April 4, 2015 and must contain demonstrations that the areas will attain the 2010 SO₂ NAAQS as expeditiously as practicable, but no later than October 4, 2018 pursuant to sections 172, 191 and 192, including a plan for enforceable measures to reach attainment of the NAAQS. Similar attainment planning SIPs for any additional areas which EPA subsequently designates nonattainment with the 2010 SO₂ NAAQS will be due for such areas within the timeframes specified in CAA section 191. EPA believes it is not appropriate to interpret the overall section 110(a)(2) infrastructure SIP obligation to require bypassing the attainment planning process by imposing separate requirements outside the attainment planning process. Such actions would be disruptive and premature absent exceptional circumstances and would interfere with a state's planning process. *See In the Matter of EME Homer City Generation LP and First Energy Generation Corp.*, Order on Petitions Numbers III-2012-06, III-2012-07, and III- 2013-01 (July 30, 2014) (hereafter, *Homer City/Mansfield Order*) at 10-19 (finding

¹² The Consent Decree, entered March 2, 2015 by the United States District Court for the Northern District of California in *Sierra Club and NRDC v. EPA*, Case 3:13-cv-03953-SI (N.D. Cal.) is available at <http://www.epa.gov/airquality/sulfurdioxide/designations/pdfs/201503FinalCourtOrder.pdf>.

Pennsylvania SIP did not require imposition of 1-hour SO₂ emission limits on sources independent of the part D attainment planning process contemplated by the CAA). EPA believes that the history of the CAA and intent of Congress for the CAA as described above demonstrate clearly that it is within the section 172 and general part D attainment planning process that Pennsylvania must include 1-hour SO₂ emission limits on sources, where needed, for the four areas designated nonattainment to reach attainment with the 2010 1-hour SO₂ NAAQS and for any additional areas EPA may subsequently designate nonattainment.

The Commenter's reliance on 40 CFR 51.112 to support its argument that infrastructure SIPs must contain emission limits adequate to provide for timely attainment and maintenance of the standard is also not supported. As explained previously in response to the background comments, EPA notes this regulatory provision applies to planning SIPs, such as those demonstrating how an area will attain a specific NAAQS and not to infrastructure SIPs which are intended to support that the states have in place structural requirements necessary to implement the NAAQS.

As noted in EPA's preamble for the 2010 SO₂ NAAQS, determining compliance with the SO₂ NAAQS will likely be a source-driven analysis and EPA has explored options to ensure that the SO₂ designations process realistically accounts for anticipated SO₂ reductions at sources that we expect will be achieved by current and pending national and regional rules. *See* 75 FR 35520. As mentioned previously, EPA will act in accordance with the entered Consent Decree's schedule for conducting additional designations for the 2010 SO₂ NAAQS and any areas designated nonattainment must meet the applicable part D requirements for these areas.

However, because the purpose of an infrastructure SIP submission is for more general planning purposes, EPA does not believe Pennsylvania was obligated during this infrastructure SIP planning process to account for controlled SO₂ levels at individual sources. *See Homer City/Mansfield Order* at 10-19.

Regarding the air dispersion modeling conducted by the Commenter pursuant to AERMOD for the coal-fired plants including the Brunner Island, Montour, Cheswick, New Castle and Shawville facilities, EPA does not find the modeling information relevant at this time for review of an infrastructure SIP. While EPA has extensively discussed the use of modeling for attainment demonstration purposes and for designations, EPA has affirmatively stated such modeling was not needed to demonstrate attainment for the SO₂ infrastructure SIPs under the 2010 SO₂ NAAQS. *See* April 12, 2012 letters to states regarding SO₂ implementation and *Implementation of the 2010 Primary 1-Hour SO₂ NAAQS, Draft White Paper for Discussion*, May 2012, available at <http://www.epa.gov/airquality/sulfurdioxide/implement.html>.¹³

EPA has proposed a Data Requirements Rule which, if promulgated, will be relevant to the SO₂ designations process. *See, e.g.*, 79 FR 27446 (May 13, 2014) (proposing process by which state air agencies would characterize air quality around SO₂ sources through ambient monitoring and/or air quality modeling techniques and submit such data to the EPA). The proposed rule includes a lengthy discussion of how EPA anticipates addressing modeling that informs determinations of states' air quality status under the 2010 SO₂ NAAQS. As stated above, EPA

¹³ EPA has provided draft guidance for states regarding modeling analyses to support the designations process for the 2010 SO₂ NAAQS. *SO₂ NAAQS Designations Modeling Technical Assistance Document (draft)*, EPA Office of Air and Radiation and Office of Air Quality Planning and Standards, December 2013, available at <http://www.epa.gov/airquality/sulfurdioxide/implement.html>.

believes it is not appropriate to bypass the attainment planning process by imposing separate attainment planning process requirements outside part D and into the infrastructure SIP process.

Finally, EPA also disagrees with the Commenter that the Pennsylvania infrastructure SIP must, to be approved, incorporate the planned retirement dates of coal-fired EGUs to ensure attainment and maintenance of the SO₂ NAAQS. Because EPA does not believe Pennsylvania's infrastructure SIP requires at this time 1-hour SO₂ emission limits on these sources or other large stationary sources to ensure attainment or maintenance or "prevent exceedances" of the 2010 SO₂ NAAQS, EPA likewise does not believe incorporating planned retirement dates for SO₂ emitters is necessary for our approval of an infrastructure SIP which we have explained meets the structural requirements of section 110(a)(2). Pennsylvania can address any SO₂ emission reductions that may be needed to attain the 2010 SO₂ NAAQS, including reductions through source retirements, in the separate attainment planning process of part D of title I of the CAA for areas designated nonattainment.

In conclusion, EPA disagrees with the Commenter's statements that EPA must disapprove Pennsylvania's infrastructure SIP submission because it does not establish specific enforceable SO₂ emission limits, either on coal-fired EGUs or other large SO₂ sources, in order to demonstrate attainment and maintenance with the NAAQS at this time.¹⁴

¹⁴ Finally, EPA does not disagree with the Commenter's claim that coal fired EGUs are a large source of SO₂ emissions in Pennsylvania based on the 2011 NEL. However, EPA does not agree that this information is relevant to our approval of the infrastructure SIP which EPA has explained meets requirements in CAA section 110(a)(2).

Comment 7: The Commenter asserts that modeling is the appropriate tool for evaluating adequacy of infrastructure SIPs and ensuring attainment and maintenance of the 2010 SO₂ NAAQS. The Commenter refers to EPA’s historic use of air dispersion modeling for attainment designations as well as “SIP revisions.” The Commenter cites to prior EPA statements that the Agency has used modeling for designations and attainment demonstrations, including statements in the 2010 SO₂ NAAQS preamble, EPA’s 2012 Draft White Paper for Discussion on Implementing the 2010 SO₂ NAAQS, and a 1994 SO₂ Guideline Document, as modeling could better address the source-specific impacts of SO₂ emissions and historic challenges from monitoring SO₂ emissions.¹⁵

The Commenter also cited to several cases upholding EPA’s use of modeling in NAAQS implementation actions, including the *Montana Sulphur* case, *Sierra Club v. Costle*, 657 F.2d 298 (D.C. Cir. 1981), *Republic Steel Corp. v. Costle*, 621 F.2d 797 (6th Cir. 1980), and *Catawba County v. EPA*, 571 F.3d 20 (D.C. Cir. 2009).¹⁶ The Commenter discusses statements made by EPA staff regarding the use of modeling and monitoring in setting emission limitations or determining ambient concentrations as a result of a source’s emissions, discussing performance of AERMOD as a model, if AERMOD is capable of predicting whether the NAAQS is attained, and whether individual sources contribute to SO₂ NAAQS violations. The Commenter cites to EPA’s history of employing air dispersion modeling for increment compliance verifications in the permitting process for the Prevention of Significant Deterioration (PSD) program required in

¹⁵ The Commenter also cites to a 1983 EPA Memorandum on section 107 designations policy regarding use of modeling for designations and to the 2012 *Mont. Sulphur & Chem. Co.* case which upheld EPA’s finding that the previously approved SIP for an area in Montana was substantially inadequate to attain the NAAQS due to modeled violations of the NAAQS.

¹⁶ *Montana Sulphur & Chemical Co. v. EPA*, 666 F.3d 1174 (9th Cir. 2012).

part C of Title I of the CAA. The Commenter claims several coal-fired EGUs including Brunner Island, Montour, Cheswick, New Castle, and Shawville are examples of sources located in elevated terrain where the AERMOD model functions appropriately in evaluating ambient impacts.

The Commenter asserts EPA's use of air dispersion modeling was upheld in *GenOn REMA, LLC v. EPA*, 722 F.3d 513 (3rd Cir. 2013) where an EGU challenged EPA's use of CAA section 126 to impose SO₂ emission limits on a source due to cross-state impacts. The Commenter claims the Third Circuit in *GenOn REMA* upheld EPA's actions after examining the record which included EPA's air dispersion modeling of the one source as well as other data.

The Commenter cites to *Vehicle Mfrs. Ass'n v. State Farm Mut. Auto Ins. Co.*, 463 U.S. 29,43 (1983) and *NRDC v. EPA*, 571 F.3d 1245, 1254 (D.C. Cir. 2009) for the general proposition that it would be arbitrary and capricious for an agency to ignore an aspect of an issue placed before it and that an agency must consider information presented during notice-and-comment rulemaking.¹⁷

Finally, the Commenter claims that Pennsylvania's proposed SO₂ infrastructure SIP lacks emission limitations informed by air dispersion modeling and therefore fails to ensure Pennsylvania will attain and maintain the 2010 SO₂ NAAQS. The Commenter claims EPA must disapprove the SO₂ infrastructure SIP as it does not "prevent exceedances" or ensure attainment and maintenance of the SO₂ NAAQS.

¹⁷ The Commenter also claims it raised similar arguments to Pennsylvania during the Pennsylvania proposal process for the infrastructure SIPs.

Response 7: EPA agrees with the Commenter that air dispersion modeling, such as AERMOD, can be an important tool in the CAA section 107 designations process for SO₂ and in developing SIPs for nonattainment areas as required by sections 172 and 191-192, including supporting required attainment demonstrations. EPA agrees that prior EPA statements, EPA guidance, and case law support the use of air dispersion modeling in the SO₂ designations process and attainment demonstration process, as well as in analyses of the interstate impact of transported emissions and whether existing approved SIPs remain adequate to show attainment and maintenance of the SO₂ NAAQS. However, as provided in the previous responses, EPA disagrees with the Commenter that EPA must disapprove the Pennsylvania SO₂ infrastructure SIP for its alleged failure to include source-specific SO₂ emission limits that show no exceedances of the NAAQS when modeled or ensure attainment and maintenance of the NAAQS.

In acting to approve or disapprove an infrastructure SIP, EPA is not required to make findings regarding current air quality status of areas within the state, regarding such area's projected future air quality status, or regarding whether existing emissions limits in such area are sufficient to meet a NAAQS in the area. All of the actions the Commenter cites, instead, do make findings regarding at least one of those issues. The attainment planning process detailed in part D of the CAA, including sections 172 and 191-192 attainment SIPs, is the appropriate place for the state to evaluate measures needed to bring in-state nonattainment areas into attainment with a NAAQS and to impose additional emission limitations such as SO₂ emission limits on specific sources.

EPA had initially recommended that states submit substantive attainment demonstration SIPs based on air quality modeling in the final 2010 SO₂ NAAQS preamble (75 FR 35520) and in subsequent draft guidance issued in September 2011 for the section 110(a) SIPs due in June 2013 in order to show how areas then-expected to be designated as unclassifiable would attain and maintain the NAAQS. These initial statements in the preamble and 2011 draft guidance, presented only in the context of the new 1-hour SO₂ NAAQS and not suggested as a matter of general infrastructure SIP policy, were based on EPA's expectation at the time, that by June 2012, most areas would initially be designated as unclassifiable due to limitations in the scope of the ambient monitoring network and the short time available before which states could conduct modeling to support designations recommendations in 2011. However, after conducting extensive stakeholder outreach and receiving comments from the states regarding these initial statements and the timeline for implementing the NAAQS, EPA subsequently stated in the April 12, 2012 letters and in the 2012 Draft White Paper that EPA was clarifying its 2010 SO₂ NAAQS implementation position and was no longer recommending such attainment demonstrations supported by air dispersion modeling for unclassifiable areas (which had not yet been designated) for the June 2013 infrastructure SIPs. Instead, EPA explained that it expected states to submit infrastructure SIPs that followed the general policy EPA had applied under other NAAQS. EPA then reaffirmed this position in the February 6, 2013 memorandum, "Next Steps for Area Designations and Implementation of the Sulfur Dioxide National Ambient Air Quality Standard."¹⁸ As previously mentioned, EPA had stated in the preamble to the NAAQS and in the prior 2011 draft guidance that EPA intended to develop and seek public comment on guidance

¹⁸ The February 6, 2013 "Next Steps for Area Designations and Implementation of the Sulfur Dioxide National Ambient Air Quality Standard," one of the April 12, 2012 state letters, and the May 2012 *Draft White Paper* are available at <http://www.epa.gov/airquality/sulfurdioxide/implement.html>.

for modeling and development of SIPs for sections 110, 172 and 191-192 of the CAA. After receiving such further comment, EPA has now issued guidance for the nonattainment area SIPs due pursuant to sections 172 and 191-192. *See* April 23, 2014 *Guidance for 1-Hour SO₂ Nonattainment Area SIP Submissions*. In addition, modeling may be an appropriate consideration for states and EPA in further designations for the SO₂ NAAQS in accordance with the Sierra Club and NRDC Consent Decree and proposed data requirements rule mentioned previously.¹⁹ While the EPA guidance for attainment SIPs and for designations for CAA section 107 and proposed process for characterizing SO₂ emissions from larger sources discuss the use of air dispersion modeling, EPA's 2013 Infrastructure SIP Guidance did not suggest that states use air dispersion modeling for purposes of the section 110(a)(2) infrastructure SIP. Therefore, as discussed previously, EPA believes the Pennsylvania SO₂ infrastructure SIP submittal contains the structural requirements to address elements in section 110(a)(2) as discussed in detail in the TSD accompanying the proposed approval. EPA believes infrastructure SIPs are general planning SIPs to ensure that a state has adequate resources and authority to implement a NAAQS. Infrastructure SIP submissions are not intended to act or fulfill the obligations of a detailed attainment and/or maintenance plan for each individual area of the state that is not attaining the NAAQS. While infrastructure SIPs must address modeling authorities in general for section 110(a)(2)(K), EPA believes 110(a)(2)(K) requires infrastructure SIPs to provide the state's authority for air quality modeling and for submission of modeling data to EPA, not specific air dispersion modeling for large stationary sources of pollutants. In the TSD for this

¹⁹ The Consent Decree in *Sierra Club and NRDC v. EPA*, Case 3:13-cv-03953-SI (N.D. Cal.) is available at <http://www.epa.gov/airquality/sulfurdioxide/designations/pdfs/201503FinalCourtOrder.pdf>. *See* 79 FR 27446 (EPA's proposed data requirements rule). *See also Updated Guidance for Area Designations for the 2010 Primary Sulfur Dioxide National Ambient Air Quality Standard*, Stephen D. Page, Director, EPA's Office of Air Quality Planning Standards, March 20, 2015, available at <http://www.epa.gov/airquality/sulfurdioxide/pdfs/20150320SO2designations.pdf>.

rulemaking action, EPA provided a detailed explanation of Pennsylvania's ability and authority to conduct air quality modeling when required and its authority to submit modeling data to the EPA.

EPA finds the Commenter's discussion of case law, guidance, and EPA staff statements regarding advantages of AERMOD as an air dispersion model for purposes of demonstrating attainment of the NAAQS to be irrelevant to the analysis of Pennsylvania's infrastructure SIP, which as we have explained is separate from the SIP required to demonstrate attainment of the NAAQS pursuant to sections 172 or 192. In addition, the Commenter's comments relating to EPA's use of AERMOD or modeling in general in designations pursuant to section 107, including its citation to *Catawba County*, are likewise irrelevant as EPA's present approval of Pennsylvania's infrastructure SIP is unrelated to the section 107 designations process. Nor is EPA's action on this infrastructure SIP related to any new source review (NSR) or PSD permit program issue. As outlined in the August 23, 2010 clarification memo, "Applicability of Appendix W Modeling Guidance for the 1-hour SO₂ National Ambient Air Quality Standard" (U.S. EPA, 2010a), AERMOD is the preferred model for single source modeling to address the 1-hour SO₂ NAAQS as part of the NSR/PSD permit programs. Therefore, as attainment SIPs, designations, and NSR/PSD actions are outside the scope of a required infrastructure SIP for the 2010 SO₂ NAAQS for section 110(a), EPA provides no further response to the Commenter's discussion of air dispersion modeling for these applications. If the Commenter resubmits its air dispersion modeling for the Pennsylvania EGUs, or updated modeling information in the appropriate context, EPA will address the resubmitted modeling or updated modeling at that time.

The Commenter correctly noted that the Third Circuit upheld EPA's section 126 finding imposing SO₂ emissions limitations on an EGU pursuant to CAA section 126. *GenOn REMA, LLC v. EPA*, 722 F.3d 513. Pursuant to section 126, any state or political subdivision may petition EPA for a finding that any major source or group of stationary sources emits, or would emit, any air pollutant in violation of the prohibition of section 110(a)(2)(D)(i) which relates to significant contributions to nonattainment or interference with maintenance of a NAAQS in another state. The Third Circuit upheld EPA's authority under section 126 and found EPA's actions neither arbitrary nor capricious after reviewing EPA's supporting docket which included air dispersion modeling as well as ambient air monitoring data showing exceedances of the NAAQS. The Commenter appears to have cited to this matter to demonstrate EPA's use of modeling for certain aspects of the CAA. We do not disagree that such modeling is appropriate for other actions, such as those under section 126. But, for the reasons explained above, such modeling is not required for determining whether Pennsylvania's infrastructure SIP has the required structural requirements pursuant to section 110(a)(2). As noted above, EPA is not acting on an interstate transport SIP in this action because Pennsylvania has not made such a submission. The decision in *GenOn Rema* does not otherwise speak to the role of air dispersion modeling as to any other planning requirements in the CAA.

In its comments, the Commenter relies on *Motor Vehicle Mfrs. Ass'n* and *NRDC v. EPA* to support its comments that EPA *must* consider the Commenter's modeling data on several Pennsylvania EGUs including Brunner Island, Montour, Cheswick, New Castle, and Shawville based on administrative law principles regarding consideration of comments provided during a

rulemaking process. For the reasons previously explained, the purpose for which the Commenter submitted the modeling – namely, to assert that current air quality in the areas in which those sources are located does not meet the NAAQS – is not relevant to EPA’s action on this infrastructure SIP, and consequently EPA is not required to consider the modeling in evaluating the approvability of the infrastructure SIP.²⁰ EPA does not believe infrastructure SIPs must contain emission limitations informed by air dispersion modeling in order to meet the requirements of section 110(a)(2)(A). Thus, EPA has evaluated the persuasiveness of the Commenter’s submitted modeling in finding that it is not relevant to the approvability of Pennsylvania’s proposed infrastructure SIP for the 2010 SO₂ NAAQS, but EPA has made no judgment regarding whether the Commenter’s submitted modeling is sufficient to show violations of the NAAQS.

While EPA does not believe that infrastructure SIP submissions are *required* to contain emission limits assuring in-state attainment of the NAAQS, as suggested by the Commenter, EPA does recognize that in the past, states have, in their discretion, used infrastructure SIP submittals as a ‘vehicle’ for incorporating regulatory revisions or source-specific emission limits into the state’s plan. *See* 78 FR 73442 (December 6, 2013) (approving regulations Maryland submitted for incorporation into the SIP along with the 2008 ozone infrastructure SIP to address ethics requirements for State Boards in sections 128 and 110(a)(2)(E)(ii)). While these SIP revisions are intended to help the state meet the requirements of section 110(a)(2), these “ride-along” SIP

²⁰ EPA notes that PADEP provided similar responses to the Commenter’s claims regarding evaluation of modeling data for an infrastructure SIP as specifically recounted by the Commenter in its March 9, 2015 comments to EPA on this rulemaking action. EPA agrees with PADEP’s responses that emissions limitations for attainment of the NAAQS are appropriate for consideration in the part D planning process and not for the infrastructure SIP process. Thus, EPA provides no further response on this issue as PADEP responded to the Commenter in Pennsylvania’s rulemaking and EPA’s responses are provided in this action.

revisions are not intended to signify that all infrastructure SIP submittals must, in order to be approved by EPA, have similar regulatory revisions or source-specific emission limits. Rather, the regulatory provisions and source-specific emission limits the state relies on when showing compliance with section 110(a)(2) have, in many cases, likely already been incorporated into the state's SIP prior to each new infrastructure SIP submission; in some cases this was done for entirely separate CAA requirements, such as attainment plans required under section 172, or for previous NAAQS.

Comment 8: The Commenter asserts that EPA may not approve the Pennsylvania proposed SO₂ infrastructure SIP because it fails to include enforceable emission limitations with a 1-hour averaging time that applies at all times. The Commenter cites to CAA section 302(k) which requires emission limits to apply on a continuous basis. The Commenter claims EPA has stated that 1-hour averaging times are necessary for the 2010 SO₂ NAAQS citing to EPA's April 23, 2014 *Guidance for 1-Hour SO₂ Nonattainment Area SIP Submissions*, a February 3, 2011, EPA Region 7 letter to the Kansas Department of Health and Environment regarding the need for 1-hour SO₂ emission limits in a PSD permit, an EPA Environmental Hearing Board (EHB) decision rejecting use of a 3-hour averaging time for a SO₂ limit in a PSD permit, and EPA's disapproval of a Missouri SIP which relied on annual averaging for SO₂ emission rates.²¹ Thus, the Commenter contends EPA must disapprove Pennsylvania's infrastructure SIP which the Commenter claims fails to require emission limits with adequate averaging times.

²¹ Sierra Club cited to *In re: Mississippi Lime Co.*, PSDAPLPEAL 11-01, 2011 WL 3557194, at *26-27 (EPA Aug. 9, 2011) and 71 FR 12623, 12624 (March 13, 2006) (EPA disapproval of a control strategy SO₂ SIP).

Response 8: EPA disagrees that EPA must disapprove the proposed Pennsylvania infrastructure SIP because the SIP does not contain enforceable SO₂ emission limitations with 1-hour averaging periods that apply at all times, as this issue is not appropriate for resolution at this stage. The comment does not assert that the SO₂ emission limits in Pennsylvania's SIP are not enforceable or that they do not apply at all times, instead the comment focuses on the lack of 1-hour averaging times. We do not believe, as suggested by the Commenter, that the emission limits are not "continuous" within the meaning of section 302(k). As EPA has noted previously, the purpose of the section 110(a)(2) SIP is to ensure that the State has the necessary structural components to implement programs for attainment and maintenance of the NAAQS.²² While EPA does agree that the averaging time is a critical consideration for purposes of substantive SIP revisions, such as attainment demonstrations, the averaging time of existing rules in the SIP is not relevant for determining that the State has met the applicable requirements of section 110(a)(2) with respect to the infrastructure elements addressed in the present SIP action.²³ Therefore, because EPA finds Pennsylvania's SO₂ infrastructure SIP approvable without the additional SO₂ emission limitations showing in-state attainment of the NAAQS, EPA finds the issues of appropriate averaging periods for such future limitations not relevant at this time. The Commenter has cited to prior EPA discussion on emission limitations required in PSD permits

²² As EPA has stated, some areas are designated nonattainment areas pursuant to CAA section 107 for the 2010 SO₂ NAAQS in the Commonwealth. Thus, while the Commonwealth, at this time, has an obligation to submit attainment plans for the 2010 SO₂ NAAQS for sections 172, 191 and 192, EPA believes the appropriate time for examining necessity of the averaging periods within any submitted SO₂ emission limits on specific sources is within the attainment planning process.

²³ For a discussion on emission averaging times for emissions limitations for SO₂ attainment SIPs, see the April 23, 2014 *Guidance for 1-Hour SO₂ Nonattainment Area SIP Submissions*. EPA explained that it is possible, in specific cases, for states to develop control strategies that account for variability in 1-hour emissions rates through emission limits with averaging times that are longer than 1-hour, using averaging times as long as 30-days, but still provide for attainment of the 2010 SO₂ NAAQS as long as the limits are of at least comparable stringency to a 1-hour limit at the critical emission value. EPA has not yet evaluated any specific submission of such a limit, and so is not at this time prepared to take final action to implement this concept.

(from an EAB decision and EPA's letter to Kansas' permitting authority) pursuant to part C of the CAA, which is neither relevant nor applicable to the present SIP action. In addition, as previously discussed, the EPA disapproval of the 2006 Missouri SIP was a disapproval relating to a control strategy SIP required pursuant to part D attainment planning and is likewise not relevant to the analysis of infrastructure SIP requirements.

Comment 9: The Commenter states that enforceable emission limits in SIPs or permits are necessary to avoid nonattainment designations in areas where modeling or monitoring shows SO₂ levels exceed the 1-hour SO₂ NAAQS and cites to a February 6, 2013 EPA document, *Next Steps for Area Designations and Implementation of the Sulfur Dioxide National Ambient Air Quality Standard*, which the Commenter contends discusses how states could avoid future nonattainment designations. The Commenter asserts EPA must ensure enforceable emission limits in the Pennsylvania infrastructure SIP will not allow "exceedances" of the SO₂ NAAQS. The Commenter claims the modeling it conducted for Brunner Island, Montour, Cheswick, New Castle, and Shawville indicates at least 28 additional counties in Pennsylvania must be designated nonattainment with the 2010 SO₂ NAAQS without such enforceable SO₂ limits. In summary, the Commenter asserts EPA must disapprove the Pennsylvania infrastructure SIP and ensure emission limits will not allow large sources of SO₂ to cause exceedances of the 2010 SO₂ NAAQS.

Response 9: EPA appreciates the Commenter's concern with avoiding nonattainment designations in Pennsylvania for the 2010 SO₂ NAAQS. However, Congress designed the CAA

such that states have the primary responsibility for achieving and maintaining the NAAQS within their geographic area by submitting SIPs which will specify the details of how the state will meet the NAAQS. Pursuant to section 107(d), the states make initial recommendations of designations for areas within each state and EPA then promulgates the designations after considering the state's submission and other information. EPA promulgated initial designations for the 2010 SO₂ NAAQS in August 2013 for areas in which monitoring at that time showed violations of the NAAQS, but has not yet issued designations for other areas and will complete the required designations pursuant to the schedule contained in the recently entered Consent Decree. EPA will designate additional areas for the 2010 SO₂ NAAQS in accordance with the CAA section 107 and existing EPA policy and guidance. Pennsylvania may, on its own accord, decide to impose additional SO₂ emission limitations to avoid future designations to nonattainment. If additional Pennsylvania areas are designated nonattainment, Pennsylvania will then have the initial opportunity to develop additional emissions limitations needed to attain the NAAQS, and EPA would be charged with reviewing whether the SIP is adequate to demonstrate attainment. *See Commonwealth of Virginia, et al., v. EPA*, 108 F.3d 1397, 1410 (D.C. Cir. 1997) (citing *Natural Resources Defense Council, Inc. v. Browner*, 57 F.3d 1122, 1123 (D.C.Cir.1995)) (discussing that states have primary responsibility for determining an emission reductions program for its areas subject to EPA approval dependent upon whether the SIP as a whole meets applicable requirements of the CAA). However, such considerations are not required of Pennsylvania at the infrastructure SIP stage of NAAQS implementation, as the Commenter's statements concern the separate designations process under section 107.²⁴ EPA disagrees that the

²⁴ EPA also notes that in EPA's final rule regarding the 2010 SO₂ NAAQS, EPA noted that it anticipates several forthcoming national and regional rules, such as the Industrial Boilers standard under CAA section 112, are likely to require significant reductions in SO₂ emissions over the next several years. *See* 75 FR 35520. EPA continues to

infrastructure SIP must be disapproved for not including enforceable emissions limitations to prevent future 1-hour SO₂ nonattainment designations.

D. Sierra Club Comments on Pennsylvania 2008 Ozone Infrastructure SIP

Comment 10: The Commenter claims EPA must disapprove the proposed infrastructure SIP for the 2008 ozone NAAQS for its failure to include enforceable measures on sources of volatile organic compounds (VOCs) and nitrogen oxides (NO_x) to ensure attainment and maintenance of the NAAQS in areas not designated nonattainment and to ensure compliance with section 110(a)(2)(A) for the 2008 ozone NAAQS. The Commenter specifically mentions EGUs as well as the oil and gas production industry as sources needing additional controls as they are major sources of ozone precursors. The Commenter claims stringent emission limits must apply at all times to ensure all areas in Pennsylvania attain and maintain the ozone NAAQS. The Commenter claims the provisions listed by Pennsylvania for section 110(a)(2)(A) in its 2008 ozone NAAQS infrastructure SIP are insufficient for attaining and maintaining the 2008 ozone NAAQS as evidenced by the Commenter's review of air quality monitoring data in areas which are not presently designated nonattainment for the 2008 ozone NAAQS. Specifically, the Commenter cites air monitoring in a number of Pennsylvania counties including Mercer, Indiana, Lebanon, Dauphin, Erie and York counties indicating "exceedances" of the NAAQS and what the Commenter asserts are design values above the NAAQS in 2010-2012, 2011-2013, and 2012-2014. The Commenter alleges that these "exceedances" demonstrate that the Pennsylvania

believe similar national and regional rules will lead to SO₂ reductions that will help achieve compliance with the 2010 SO₂ NAAQS. If it appears that states with areas designated nonattainment in 2013 will nevertheless fail to attain the NAAQS as expeditiously as practicable (but no later than October 2018) during EPA's review of attainment SIPs required by section 172, the CAA provides authorities and tools for EPA to solve such failure, including, as appropriate, disapproving submitted SIPs and promulgating federal implementation plans. Likewise, for any areas designated nonattainment after 2013, EPA has the same authorities and tools available to address any areas which do not timely attain the NAAQS.

2008 ozone infrastructure SIP with existing regulations, statutes, source-specific limits and programs fails to demonstrate the infrastructure SIP will ensure attainment and maintenance of the 2008 ozone NAAQS. Thus, the Commenter asserts EPA must disapprove the 2008 ozone infrastructure SIP.

In addition, the Commenter asserts that the infrastructure SIP required by section 110(a) must provide assurances that the NAAQS will be attained and maintained for areas not designated nonattainment and asserts that the Pennsylvania infrastructure SIP must contain state-wide regulations and emission limits that “ensure that the proper mass limitations and short term averaging periods are imposed on certain specific large sources of NO_x such as power plants. These emission limits must apply at all times ... to ensure that all areas of Pennsylvania attain and maintain the 2008 eight-hour Ozone NAAQS.” The Commenter suggests limits should be set on a pounds per hour (lbs/hr) basis for EGUs to address variation in mass emissions and ensure protection of the ambient air quality. The Commenter cites to NO_x limits from PSD permits issued to EGUs with low NO_x emission rates, claiming such rates and related control efficiencies are achievable for EGUs. The Commenter suggests short-term averaging limits would ensure EGUs cannot emit NO_x at higher rates on days when ozone levels are worst while meeting a longer-term average. The Commenter also contends that adding control devices and emission limits on EGUs are a “cost effective option to reduce NO_x pollution and attain and maintain the 2008 ozone NAAQS.”

Finally, the Commenter contends the proposed ozone infrastructure SIP cannot ensure Pennsylvania will attain and maintain the 2008 ozone NAAQS and contends EPA must

disapprove the SIP for lack of emission limits to attain and maintain the ozone NAAQS statewide.

Response 10: EPA disagrees with the commenter that the infrastructure SIPs must include detailed attainment and maintenance plans for all areas of the state and must be disapproved if ozone air quality data that became available late in the process or after the SIP was due and submitted changes the status of areas within the state.²⁵ EPA has addressed in detail in prior responses above the Commenter's general arguments that the statutory language, legislative history, case law, EPA regulations, and prior rulemaking actions by EPA mandate the interpretation it advocates – i.e., that infrastructure SIPs must ensure attainment and maintenance of the NAAQS. EPA believes that section 110(a)(2)(A) is reasonably interpreted to require states to submit SIPs that reflect the first step in their planning for attaining and maintaining a new or revised NAAQS and that they contain enforceable control measures and a demonstration that the state has the available tools and authority to develop and implement plans to attain and maintain the NAAQS, including the 2008 ozone NAAQS.

Moreover, the CAA recognizes and has provisions to address changes in air quality over time, such as an area slipping from attainment to nonattainment or changing from nonattainment to attainment. These include provisions providing for redesignation in section 107(d) and provisions in section 110(k)(5) allowing EPA to call on the state to revise its SIP, as appropriate.

²⁵ EPA notes however that the data presented by the Commenter in table 5 of its March 9, 2015 comments indicates a general improving trend in ozone air quality for the specific counties the Commenter included. The data could equally be used to indicate improving ozone air quality based on existing measures in the Pennsylvania SIP.

The Commenter suggests that EPA must disapprove the Pennsylvania ozone infrastructure SIP because the fact that a few areas in Pennsylvania recently had air quality data slightly above the standard therefore proves that the infrastructure SIP is inadequate to demonstrate maintenance of the ozone NAAQS for those areas. EPA disagrees with the Commenter because EPA does not believe that section 110(a)(2)(A) requires detailed planning SIPs demonstrating either attainment or maintenance for specific geographic areas of the state. The infrastructure SIP is triggered by promulgation of the NAAQS, not designation. Moreover, infrastructure SIPs are due three years following promulgation of the NAAQS and designations are not due until two years (or in some cases three years) following promulgation of the NAAQS. Thus, during a significant portion of the period that a state has available for developing the infrastructure SIP, it does not know what the designation will be for individual areas of the state.²⁶ In light of the structure of the CAA, EPA's long-standing position regarding infrastructure SIPs is that they are general planning SIPs to ensure that the state has adequate resources and authority to implement a NAAQS in general throughout the state and not detailed attainment and maintenance plans for each individual area of the state.

EPA's interpretation that infrastructure SIPs are more general planning SIPs is consistent with the statute as understood in light of its history and structure as explained previously in response to prior comments. While at one time section 110 did provide the only detailed SIP planning provisions for states and specified that such plans must provide for attainment of the NAAQS, part D of title I of the CAA (not CAA section 110) governs the substantive planning process,

²⁶ While it is true that there may be some monitors within a state with values so high as to make a nonattainment designation of the county with that monitor almost a certainty, the geographic boundaries of the nonattainment area associated with that monitor would not be known until EPA issues final designations. Moreover, the five areas of concern to the Commenter do not fit that description in any event.

including planning for attainment and maintenance of the NAAQS.

For the reasons explained by EPA in this action, EPA disagrees with the Commenter that EPA must disapprove an infrastructure SIP revision if there are monitored violations of the standard in the state and the section 110(a)(2)(A) revision does not have detailed plans for demonstrating how the state will bring that area into attainment or ensure maintenance of the NAAQS. Rather, EPA believes that the proper inquiry at this juncture is whether the state has met the basic structural SIP requirements appropriate at the point in time EPA is acting upon the submittal. EPA's NPR and TSD for this rulemaking address why the Pennsylvania SIP meets the basic structural SIP requirements as to the elements addressed in section 110(a)(2) in the NPR for the 2008 ozone NAAQS.

As addressed in EPA's proposed approval for this rule, Pennsylvania submitted a list of existing emission reduction measures in the SIP that control emissions of NO_x and VOCs. Pennsylvania's SIP revision reflects numerous provisions that have the ability to reduce ground level ozone and its precursors. The Pennsylvania SIP relies on measures and programs used to implement previous ozone NAAQS. Because there is no substantive difference between the previous ozone NAAQS and the more recent ozone NAAQS, other than the level of the standard, the provisions relied on by Pennsylvania will provide benefits for the new NAAQS; in other words, the measures reduce *overall* ground-level ozone and its precursors and are not limited to reducing ozone levels to meet one specific NAAQS. Although additional control measures for ozone precursors such as those mentioned by the Commenter may be considered by PADEP and could be submitted with an infrastructure SIP, these additional measures are not a requirement in order

for Pennsylvania to meet CAA section 110(a)(2)(A). In approving Pennsylvania's infrastructure SIP revision, EPA is affirming that Pennsylvania has sufficient authority to take the types of actions required by the CAA in order to bring such areas back into attainment.

Finally, EPA appreciates the Commenter's information regarding EGU NO_x control measures and reduction efficiencies as well as emissions limitations applicable to new or modified EGUs which were set during the PSD or NSR permit process. Additional NO_x regulations on emissions from EGUs would likely reduce ozone levels further in one or more areas in Pennsylvania. Congress established the CAA such that each state has primary responsibility for assuring air quality within the state and each state is first given the opportunity to determine an emission reduction program for its areas subject to EPA approval, with such approval dependent upon whether the SIP as a whole meets the applicable requirements of the CAA. *See Virginia v. EPA*, 108 F.3d at 1410. The Commonwealth could choose to consider additional control measures for NO_x at EGUs to ensure attainment and maintenance of the ozone NAAQS as Pennsylvania moves forward to meet the more prescriptive planning requirements of the CAA in the future. However, as we have explained, the Commonwealth is not required to regulate such sources for purposes of meeting the infrastructure SIP requirements of CAA section 110(a)(2).

In addition, emission limits with the shorter-term averaging rates suggested by the Commenter could be considered within the part D planning process to ensure attainment and maintenance of the 2008 ozone NAAQS. As EPA finds Pennsylvania's NO_x and VOC provisions presently in the SIP sufficient for infrastructure SIP purposes and specifically for CAA section 110(a)(2)(A), further consideration of averaging times is not appropriate or relevant at this time. Thus, EPA

disagrees with the Commenter that Pennsylvania's ozone infrastructure SIP must be disapproved for failure to contain sufficient measures to ensure attainment and maintenance of the NAAQS.

Comment 11: The Commenter states enforceable emission limits are necessary to avoid future nonattainment designations in areas where Pennsylvania's monitoring network has shown "exceedances" with the 2008 ozone NAAQS in recent years. The Commenter stated EPA must address inadequacies in enforceable emission limitations relied upon by Pennsylvania for its ozone infrastructure SIP to comply with CAA section 110(a)(2)(A) and stated EPA must disapprove the ozone infrastructure SIP to ensure large sources of NO_x and VOCs cannot contribute to exceedances of the ozone NAAQS and prohibit attainment and maintenance of the ozone NAAQS in all of Pennsylvania.

Response 11: For the reasons previously discussed, EPA disagrees with the Commenter that we must disapprove the Pennsylvania ozone infrastructure SIP because it does not demonstrate how areas that may be newly violating the ozone NAAQS since the time of designation can be brought back into attainment. Enforceable emission limitations to avoid future nonattainment designations are not required for EPA to approve an infrastructure SIP under CAA section 110, and any emission limitations needed to assure attainment and maintenance with the ozone NAAQS will be determined by Pennsylvania and reviewed by EPA as part of the part D attainment SIP planning process. Thus, EPA disagrees with the Commenter that EPA must disapprove the ozone infrastructure SIP to ensure large sources of NO_x and VOC do not contribute to exceedances of the NAAQS or prohibit implementation, attainment or maintenance of the ozone NAAQS. As explained in the NPR and TSD, Pennsylvania has sufficient emission

limitations and measures to address NO_x and VOC emissions for CAA section 110(a)(2)(A).

III. Final Action

EPA is approving the following elements of Pennsylvania's June 15, 2014 SIP revisions for the 2008 ozone NAAQS and the 2010 SO₂ NAAQS: Section 110(a)(2)(A), (B), (C), (D)(i)(II) (PSD requirements), (D)(ii), (E), (F), (G), (H), (J), (K), (L), and (M). Pennsylvania's SIP revisions provide the basic program elements specified in Section 110(a)(2) necessary to implement, maintain, and enforce the 2008 ozone NAAQS and the 2010 SO₂ NAAQS. This final rulemaking action does not include action on section 110(a)(2)(I) which pertains to the nonattainment planning requirements of part D, Title I of the CAA, because this element is not required to be submitted by the 3-year submission deadline of section 110(a)(1) of the CAA, and will be addressed in a separate process. This final rulemaking action also does not include action on section 110(a)(2)(D)(i)(I) for interstate transport for the 2008 ozone or the 2010 SO₂ NAAQS as Pennsylvania's July 15, 2014 SIP submissions did not address this element for either NAAQS nor does this rulemaking include any action on section 110(a)(2)(D)(i)(II) for visibility protection for either NAAQS. While Pennsylvania's July 15, 2014 SIP submissions for the 2008 ozone and 2010 SO₂ NAAQS included provisions addressing visibility protection, EPA will take later, separate action on this element for both of these NAAQS.

IV. Statutory and Executive Order Reviews

A. General Requirements

Under the CAA, the Administrator is required to approve a SIP submission that complies with

the provisions of the CAA and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve state choices, provided that they meet the criteria of the CAA. Accordingly, this action merely approves state law as meeting Federal requirements and does not impose additional requirements beyond those imposed by state law. For that reason, this action:

- is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.);
- is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.);
- does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);
- does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the CAA; and

- does not provide EPA with the discretionary authority to address, as appropriate, disproportionate human health or environmental effects, using practicable and legally permissible methods, under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the state, and EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law.

B. Submission to Congress and the Comptroller General

The Congressional Review Act, 5 U.S.C. 801 et seq., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the **Federal Register**. A major rule cannot take effect until 60 days after it is published in the **Federal Register**. This action is not a “major rule” as defined by 5 U.S.C. 804(2).

C. Petitions for Judicial Review

Under section 307(b)(1) of the CAA, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by [Insert date 60 days from date

of publication of this document in the Federal Register]. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action.

This action pertaining to Pennsylvania's section 110(a)(2) infrastructure elements for the 2008 ozone NAAQS and 2010 SO₂ NAAQS may not be challenged later in proceedings to enforce its requirements. (*See* section 307(b)(2).)

List of Subjects in 40 CFR part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Ozone, Reporting and recordkeeping requirements, Sulfur oxides, Volatile organic compounds.

Dated: July 24, 2015

William C. Early, Acting
Regional Administrator,
Region III

40 CFR part 52 is amended as follows:

PART 52 – APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401 et seq.

Subpart NN-- Pennsylvania

2. In § 52.2020, the table in paragraph (e)(1) is amended by adding two entries for “Section 110(a)(2) Infrastructure Requirements for the 2008 ozone NAAQS” and “Section 110(a)(2) Infrastructure Requirements for the 2010 SO₂ NAAQS” at the end of the table to read as follows:

§ 52.2020 Identification of plan.

* * * *

(e) * * *

(1) * * *

Name of non-regulatory SIP revision	Applicable geographic area	State submittal date	EPA Approval date	Additional explanation
* * * * *	* *			
Section 110(a)(2) Infrastructure Requirements for the 2008 ozone NAAQS	Statewide	7/15/14	[Insert date of Federal Register publication] [Insert Federal Register citation]	This rulemaking action addresses the following CAA elements: 110(a)(2)(A), (B), (C), (D)(i)(II) (prevention of significant deterioration), (D)(ii), (E), (F), (G), (H), (J), (K), (L), and (M).
Section 110(a)(2) Infrastructure Requirements for the 2010 SO ₂ NAAQS	Statewide	7/15/14	[Insert date of Federal Register publication] [Insert Federal Register citation]	This rulemaking action addresses the following CAA elements: 110(a)(2)(A), (B), (C), (D)(i)(II) (prevention of significant deterioration), (D)(ii), (E), (F), (G), (H), (J), (K), (L), and (M).

